

INSTALLATION

G U I D E

CORALAIS™  
RITE-TEMP™  
BATH AND SHOWER  
FAUCET

THE BOLD LOOK  
OF **KOHLER**®

## IMPORTANT INSTRUCTIONS

### READ AND SAVE FOR THE CONSUMER

 **WARNING:** Risk of scalding or other severe injury.

- Before completing installation, the installer must set the maximum water temperature setting of this valve to minimize the risks associated with scalding hazards according to ASTM F 444.
- Do not install a shut-off device on either outlet of this valve. The installation of any such device may create a cross-flow condition at the valve and affect the water temperature.
- Factors that change the temperature of the water supplied to the valve, such as seasonal water temperature changes, and water heater replacement or servicing, will change the maximum water temperature supplied by the valve and may create a scalding hazard. The pressure-balanced valve **will not** compensate for changes in the water supply temperature; adjust the maximum water temperature setting of this pressure-balanced valve when such changes occur.
- Pressure-balanced valves may not provide protection against scalding if there is a failure of other temperature-limiting devices elsewhere in the plumbing system.

**The installer is responsible for installing the valve and adjusting the maximum water temperature of this pressure-balanced valve according to instructions.**

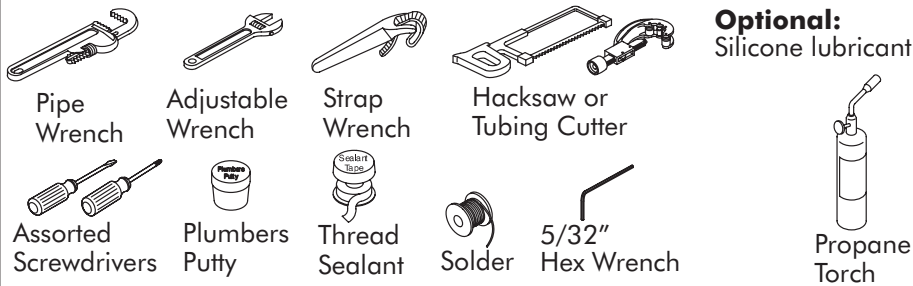
**This valve meets or exceeds ANSI A112.18.1M and ASSE 1016.**

If you do not understand any of the installation or temperature adjustment instructions in this document, in the United States please contact our Customer Service Department at **1-800-4-KOHLER**. Outside the U.S. please contact your distributor.

**IMPORTANT:** Please fill in the blanks below and on the valve label. Then insert these instructions into the plastic bag included with the valve package, and attach the plastic bag to the valve handle for the owner's reference.

**This device has been preset by \_\_\_\_\_  
of \_\_\_\_\_ to ensure a safe maximum  
temperature. Any change in the setting may raise the  
discharge temperature above the limit considered  
safe, and lead to scalds. Date: \_\_\_\_\_**

## RECOMMENDED TOOLS AND MATERIALS



**Optional:**  
Silicone lubricant

Propane  
Torch

## BEFORE YOU BEGIN

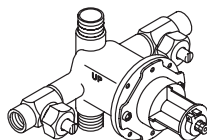


**CAUTION: Risk of product damage.** The valve assembly contains plastic components. Remove the stop nut and stem assembly, valve cap and pressure balancing unit before applying soldering heat to the valve body.

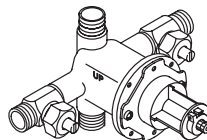
- Observe all local plumbing codes.
- The valve shuts off by water pressure. Do not force the handle in any direction. To turn the valve off, gently turn the handle to the “Off” position.
- Flush all piping thoroughly before installing the Rite-Temp valve.
- Do not use plastic pipe between the Rite-Temp valve and spout. Use 1/2” nominal copper tube or 1/2” iron pipe.
- Do not connect a deck-mount spout, diverter, or hand shower to the spout outlet, unless the valve’s shower outlet is capped.
- Install pipe or tube in a straight drop of 7” (17.8cm) to 18” (45.7cm) with only one elbow between the valve and the wall-mounted spout. Other types of installations may cause unsatisfactory shower performance.

## SPECIAL NOTE

**NOTE:** When using K-304 or K-308 series valves, replace the existing valve cap subassembly with the valve cap subassembly in the #77886 Mixer Cap SP Kit (included). Installation instructions are included in the kit.



K-304



K-308

## 1. PREPARE SITE

### ROUGH-IN PLUMBING

Shut off the main water supply.  
If the bathing fixture has been installed, cover the fixture to prevent damage to the surfaces.  
Install or relocate the supply piping as necessary.

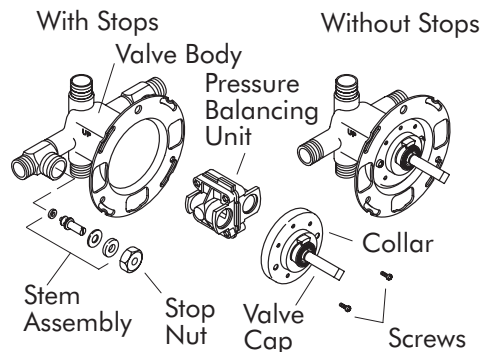
**NOTE:** To improve clarity, the plaster guard dome is not shown in some of the illustrations.

### SUPPORT FRAMING

Determine the location of the showerhead, valve and spout.  
Install the support framing.

## 2. PREPARE VALVE

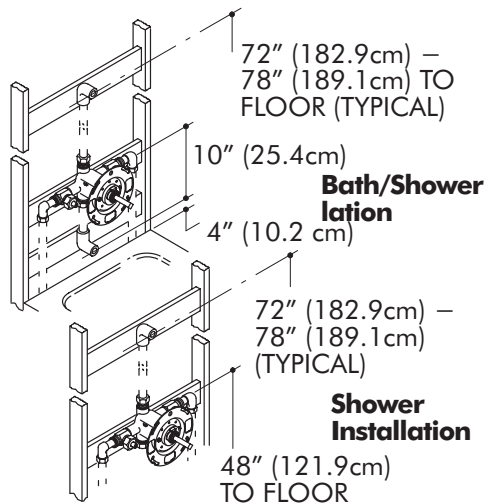
Carefully remove the stop nut and stem assembly, valve cap, collar and pressure balancing unit before applying soldering heat to the valve body.



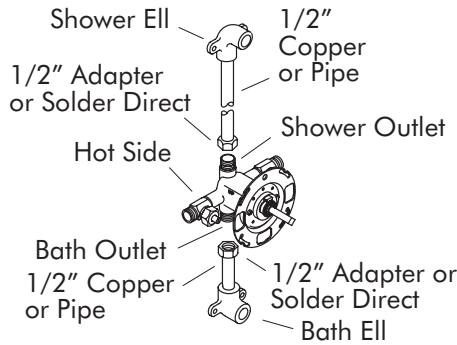
## 3. INSTALL VALVE

**NOTE:** A valve with the stops installed is shown throughout the instructions.

Install the valve on the support framing so the "UP" mark on the valve is facing upward.



Install elbows and adapters (if needed) to the 1/2" copper tubing or 1/2" pipe of the proper length. Apply pipe thread sealant and connect the piping to the bath and shower outlets of the valve.



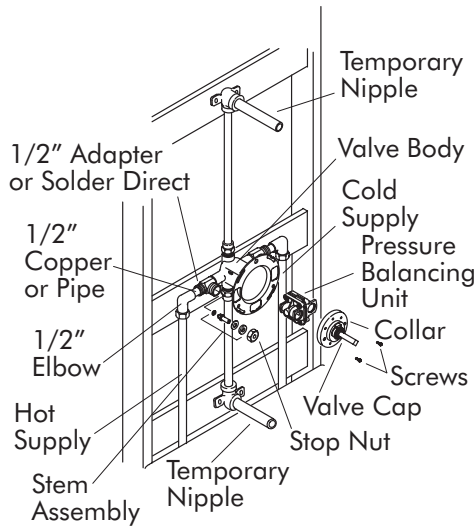
**CAUTION: Risk of product damage.** The valve assembly contains plastic components. Remove the stop nut and stem assembly, valve cap and pressure balancing unit before applying soldering heat to the valve body.

Connect the water supplies to the valve body using elbows, 1/2" copper tubing or pipe and adapters (if needed). Use thread sealant on all threaded connections.

**IMPORTANT!** Secure the piping to the framing.

Temporarily install 1/2" nipples to the bath and shower elbows so they will extend at least 2" (50cm) beyond the finished wall.

If the inner valve components had been removed for soldering, reinstall them now.

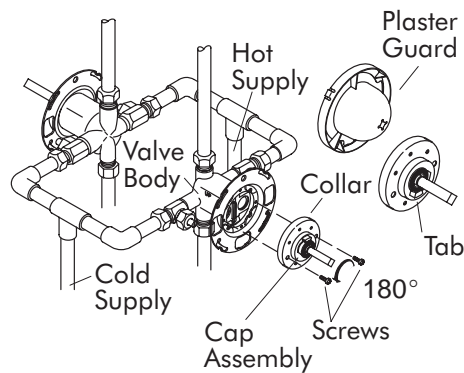


### Back-to-Back Installation:

Never install a valve body upside down. If two valves are installed in a back-to-back configuration, install both as previously instructed. The supplies to one of the valves will be reversed.

To correct the valve control on the reversed valve, remove the plaster guard, cap assembly and collar. Rotate the cap assembly and collar 180° (tab on bottom), reassemble and tighten the screws.

Reinstall the plaster guard.



## 4. INSTALLATION CHECKOUT

Install caps to the temporary bath and shower nipples.

Turn on the hot and cold water supplies and check the new installation for leaks.

Remove the caps from the temporary nipples.

Remove the plaster guard.

Turn the valve stem to the "On" position and cycle the control through its operating range.

Turn the valve off.

If the valve has stops, rotate both stop adjustments fully clockwise.

Turn the valve on and verify that water does not run.

Turn the valve off and rotate both stop adjustments fully counterclockwise.

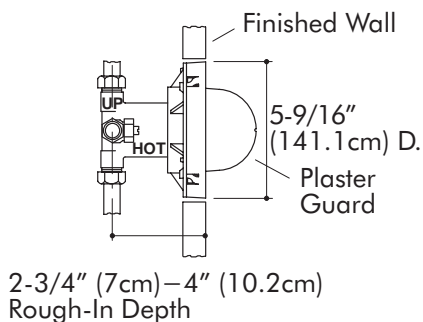
Reinstall the plaster guard.

## 5. INSTALL WALL

**Thick Wall Installation (Tile, Plaster, Marble, etc.):** Provide a 5-9/16" (141.1cm) diameter hole in the rough wall material. The flat front surface of the plaster guard must be flush with the finished wall.

Complete the finished wall.

Do not remove the plaster guard until instructed.



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### Thin Wall Installation

**(Fiberglass, Acrylic):** Remove the plaster guard from the backing plate.

Twist the plaster guard dome to separate it from the outer ring. Discard the outer ring.

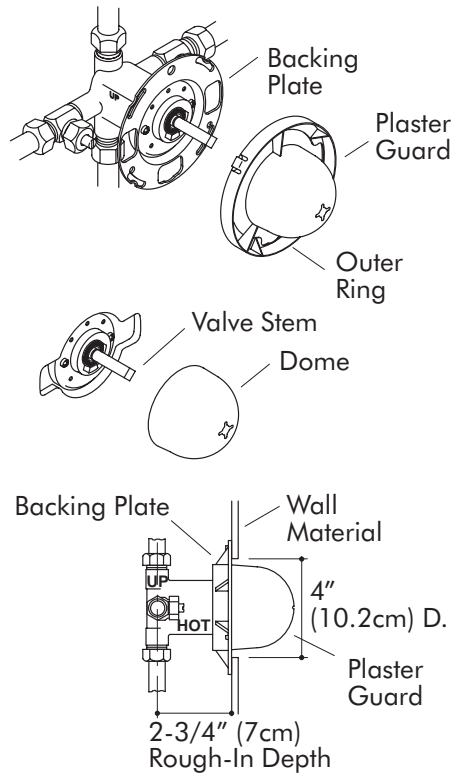
Slide the dome over the valve stem.

Provide a 4" (10.2cm) diameter hole in the finished wall material.

Make openings for the stops (if included) by using the holes in the backing plate as a guide.

Secure the backing plate to the back of the wall material.

Do not remove the dome until instructed.



## 6. INSTALL SPOUT

Remove the temporary nipple from the bath elbow.

**CAUTION: Risk of internal seal damage.** Loosen the spout setscrew with a  $\frac{5}{32}$ " hex wrench before installing the spout.

**CAUTION: Risk of internal seal damage.** Do not use petroleum-based lubricants. If the spout will not slide over the tubing, use soapy water or a silicone-based lubricant to help assembly.

**For a slip-fit spout,** apply thread sealant and install a  $\frac{1}{2}$ " copper tube to extend between  $1\frac{1}{2}$ " (3.8cm) and  $2\frac{7}{8}$ " (7.3cm) beyond the finished wall. Deburr the copper tubing.

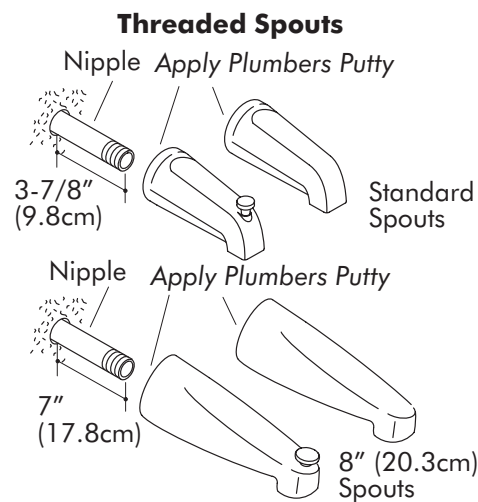
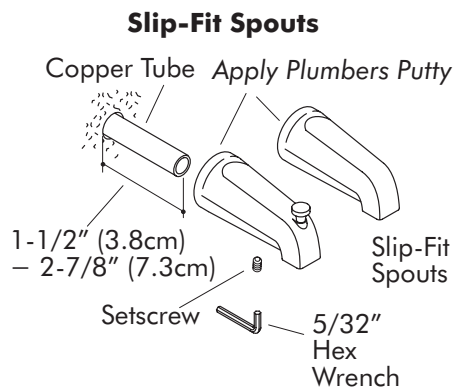
Loosen the setscrew with a  $\frac{5}{32}$ " hex wrench. Apply plumbers putty or other sealant around the inlet end of spout according to the putty manufacturer's instructions. Install the spout and carefully retighten the setscrew. Do not overtighten the setscrew.

Remove any excess putty.

**For a threaded spout,** apply thread sealant and install a  $\frac{1}{2}$ " NPT nipple to extend  $3\frac{7}{8}$ " (9.8cm) (for standard spouts) or 7" (17.8cm) (for 8" (20.3cm) spouts) beyond the finished wall.

Apply plumbers putty or other sealant around the inlet end of the spout according to putty manufacturer's instructions. Apply thread sealant to the nipple and install the spout to the nipple. Carefully tighten with a clean strap wrench.

Remove any excess putty.





## 7. INSTALL SHOWER ARM AND SHOWERHEAD

**CAUTION: Risk of product damage.** To avoid plugging the showerhead spray outlets, use thread sealant tape on the shower arm threads. Do not use pipe thread sealant (pipe dope).

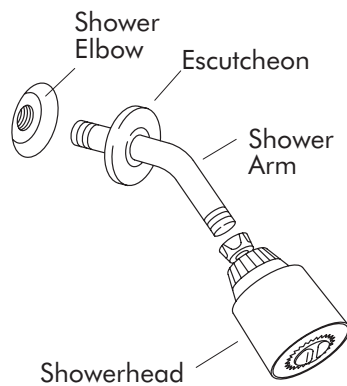
Remove the temporary nipple from the shower elbow.

Apply plumbers putty or other sealant to the back of the escutcheon according to the putty manufacturer's instructions. Slide the escutcheon over the shower arm.

Apply thread sealant tape to the shower arm and install the shower arm to the shower elbow. Carefully tighten with a clean strap wrench. Press the escutcheon against the finished wall. Remove any excess putty.

With the showerhead off, flush the system.

Apply thread sealant tape to the shower arm and install the showerhead to the shower arm.



## 8. ADJUSTMENTS

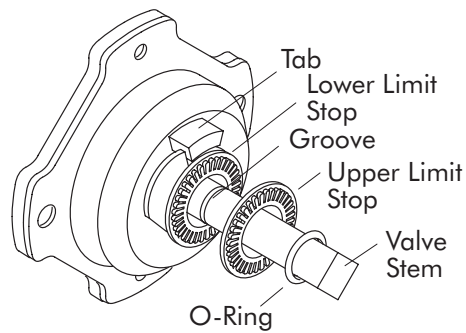
### MAXIMUM WATER TEMPERATURE ADJUSTMENT

Remove the handle and face plate from the valve, if installed.

Turn the valve stem fully clockwise to get maximum hot water flow.

To adjust the maximum temperature, slide the stem O-ring out of groove and part way up valve stem. Move the upper limit stop ring part way up the valve stem. Rotate the valve stem until the desired maximum water temperature is reached. Rotate lower limit stop ring until it contacts the tab. Slide the upper limit stop down the valve stem to engage the lower limit stop. Slide the O-ring into the valve stem groove.

Rotate the valve stem counterclockwise to shut the water off. Reinstall the handle and face plate.

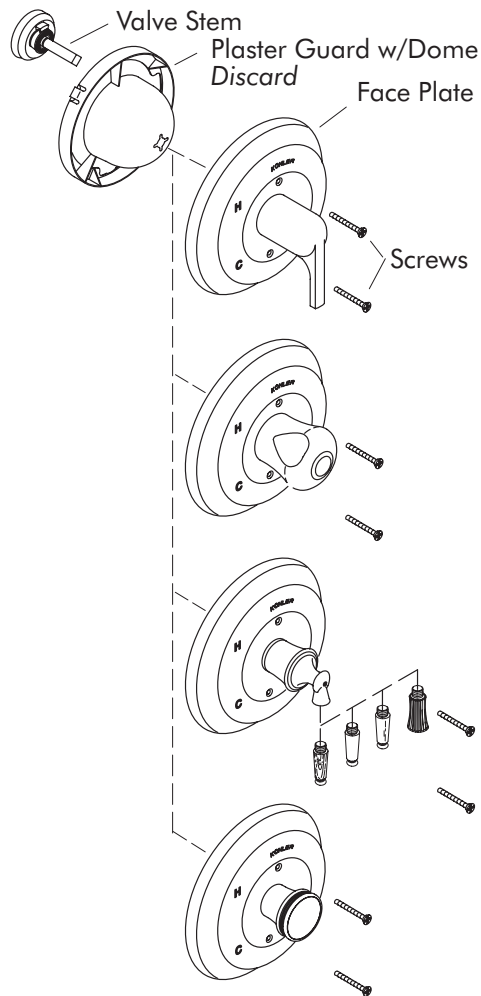


## 9. INSTALL FACE PLATE AND HANDLE

Remove and discard the plaster guard, if installed.

Rotate the valve stem fully counterclockwise.

Install the handle and face plate onto the valve and carefully secure with screws. Do not overtighten the screws.



## **CALL US FOR HELP**

Questions? Problems? First review the installation instructions to ensure correct installation. For additional assistance in the USA, call our Customer Service Department for direct help. You may also contact us at our web site listed below.

**1-800-4-KOHLER**

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**kohler.com**